

figure, in his collected memoirs, which is very correct, will convince any one that it is almost impossible. M. Agardh, indeed, professes that he is not quite certain whether an external membrane really exists or not; and his figures and observations seem to indicate that it is really present. But even supposing his observations to have reference to a lining membrane only, they differ greatly from those of preceding observers, except in cases where an evident and easy explanation as to the apparent crossing of the constituent fibres exists, in the circumstance that he finds these fibres not simply taking a uniform spiral direction, but felted with one another in distinct fascicles, and passing from one cell to those in immediate contact with it.—M. J. B.—*Gardeners' Chronicle*, Feb. 12, 1853.

METEOROLOGICAL OBSERVATIONS FOR JAN. 1853.

*Chiswick*.—January 1. Densely overcast. 2. Rain. 3. Fine. 4. Boisterous, with rain. 5. Fine: exceedingly fine in forenoon: clear at night. 6. Fine: cloudy and boisterous. 7. Rain: boisterous, with constant heavy rain. 8. Fine. 9. Fine, with bright sun. 10. Rain. 11. Clear: overcast. 12. Boisterous, with heavy showers. 13. Densely clouded: very fine: clear. 14. Clear: fine: overcast. 15. Rain: clear at night. 16. Fine: rain: hazy. 17. Cloudy: clear at night. 18. Fine: clear: frosty at night. 19. Uniformly overcast: drizzly: very boisterous at night. 20. Densely clouded and boisterous: rain. 21. Hazy: cloudy: showery. 22. Cloudy: clear and cold: hurricane, without rain at night. 23. Overcast and cold: clear. 24. Overcast throughout. 25. Foggy. 26. Foggy: fine: cloudy. 27. Fine: densely clouded: rain at night. 28. Overcast: cloudy. 29. Overcast throughout. 30. Overcast: rain at night. 31. Clear and frosty: very fine, with bright sun: foggy at night.

Mean temperature of the month .....	40°·85
Mean temperature of Jan. 1852 .....	39·66
Mean temperature of Jan. for the last twenty-seven years ...	36·90
Average amount of rain in Jan. ....	1·68 inch.

*Boston*.—Jan. 1. Cloudy. 2. Fine. 3—5. Cloudy. 6. Cloudy: rain P.M. 7. Cloudy. 8. Fine. 9. Cloudy. 10. Cloudy: rain A.M. 11, 12. Fine: rain P.M. 13, 14. Fine. 15. Rain A.M. 16. Fog: rain P.M. 17. Cloudy. 18. Fine. 19, 20. Fine: rain A.M. 21. Cloudy. 22. Fine: rain P.M. 23. Fine. 24. Cloudy: rain P.M. 25, 26. Cloudy. 27. Cloudy: rain P.M. 28, 29. Cloudy. 30, 31. Fine.

*Sandwick Manse, Orkney*.—Jan. 1. Clear A.M.: cloudy, lightning P.M. 2. Clear A.M.: clear, aurora, lightning P.M. 3. Cloudy A.M.: clear, aurora P.M. 4. Rain, cloudy A.M.: showers P.M. 5. Clear A.M.: sleet-showers P.M. 6. Cloudy A.M.: snowing, aurora P.M. 7. Cloudy A.M.: rainy, aurora P.M. 8. Showers A.M.: showers, aurora P.M. 9. Sleet-showers A.M.: hail, aurora P.M. 10. Showers A.M.: fine, aurora P.M. 11. Rain A.M.: rain, cloudy P.M. 12. Bright A.M.: clear, aurora P.M. 13. Bright A.M.: showers P.M. 14. Hail-showers A.M.: clear, aurora P.M. 15. Bright, frost A.M.: clear, frost P.M. 16. Frost A.M.: cloudy, frost P.M. 17. Bright, frost A.M.: clear, frost P.M. 18. Cloudy, frost A.M.: showers P.M. 19. Cloudy A.M.: showers P.M. 20. Rain A.M.: clear, large halo P.M. 21. Cloudy A.M.: showers P.M. 22. Showers A.M.: hail-showers P.M. 23. Clear, frost A.M.: fine, clear P.M. 24. Clear, frost A.M.: frost, clear P.M. 25. Bright A.M.: clear P.M. 26. Showers A.M.: frost, clear P.M. 27. Bright A.M.: clear P.M. 28. Clear A.M. and P.M. 29. Bright A.M.: rain P.M. 30. Rain A.M.: showers, aurora P.M. 31. Bright A.M.: fine P.M.

Mean temperature of Jan. for twenty-six previous years .....	38°·60
Mean temperature of this month .....	38·55
Average quantity of rain in Jan. for seven years previous .....	4·21 inches.